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DETERMINATION OF THE BIOACTIVE POTENTIAL (ANTIOXIDANT ACTIVITY) OF CAMEL MILK DURING FERMENTATION PROCESS

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ABSTRACT

An experiment was conducted to explore the possibilities of utilisation of camel milk for production of bioactive peptides which have antioxidant potential by action of fermentation using 2 dairy cultures: *Lactococcus lactis* spp. *cremoris* and *Lactococcus lactis* spp. *lactis*. Pasteurised camel milk was incubated with these 2 cultures @ 1% at 37°C for a period of 12 hour fermentation. During this period change antioxidant potential was measured using ABTS and DPPH radical scavenging activity. According to ABTS and DPPH radical scavenging activity antioxidant activity of camel milk samples, the fermentative potential of *Lactococcus lactis* spp. *cremoris* was found significantly higher ($P<0.05$), when it was compared with *Lactococcus lactis* spp. *lactis*. Thus milk samples fermented with *Lactococcus lactis* spp. *cremoris* were used for production of fermented camel milk products at the time period of fermentation, where it showed highest antioxidant activity (both ABTS and DPPH) (*i.e.* 10 hours of fermentation for camel milk).

Key words: ABTS, camel milk, DPPH, fermentation